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This paper contains preliminary findings from research work still in progress and should not be quoted without prior approval of the authors.

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UNRAVELLING THE THREADS OF THE MFA

by

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1. This is a draft of a paper prepared for a conference on Textiles in the Uruguay Round, held at The Institute of International Economic Studies, University of Stockholm, June 20-21, 1989. We are grateful to the Social Sciences and Humanities Research Council, Ottawa, for their support of modelling work on global trade in textiles and clothing on which this paper draws, and to Carl Hamilton for helpful comments on an earlier draft.

INTRODUCTION

The aim of this paper is to lay out for negotiators in the working group on textiles and clothing in the Uruguay Round what some of the possible economic effects of the Multi Fiber Arrangement (the MFA) may be. We draw on recent literature as far as we are able, but emphasize that most available quantitative work focuses on the effects on developed countries of trade restraints on textiles and clothing (on welfare, employment and trade volumes). Discussion of the effects on developing countries is often confined to conjecture, which over time has seemed to grow into accepted verbal folklore.

We highlight the range of potential effects of the MFA on developing countries; including traditional trade and welfare effects, but also relocation of manufacture from one developing country to another, quality upgrading, internal developing country resource allocation effects via quota allocation schemes, and effects on the growth process. Most of these further effects are so little studied that it makes it difficult to offer conclusive statements as to what the MFA actually does to economic performance of individual countries. We also summarize some recent modelling work of our own which sheds light on some of these issues.

We emphasize the many paradoxes represented by the MFA. It is often seen as one of the most pernicious trade restrictions in the artillery of product-specific measures used by developed countries. Its coverage of products and countries grows with

each MFA renegotiation, and its implementation seems to be continually tightened. At the same time, data on quota utilization rates are surprisingly low for a number of countries, successful exporters such as Hong Kong, Republic of Korea, and Taiwan, China have consistently shown growth rates of textiles and clothing exports considerably in excess of their quota growth allowed under the MFA, and the high GDP growth in the export-led Asian NICs does not seem to have been significantly hindered by such export restraints.[2] Moreover, surprisingly large adjustments in the textile and clothing sector seem to have occurred in a number of the OECD countries during the period in which restrictions have operated.

Our conclusions are: firstly, that there is considerable uncertainty as to what the effects of the MFA actually are; secondly, that there is verbal folklore which has evolved as to some of the alleged effects which, on closer scrutiny, may be no more supportable than claims of opposite effects; and thirdly, that more work is needed on all fronts, and especially on the effects of the MFA on the growth process in developing countries.

This may all seem unhelpful to trade negotiators. However, our bottom line emphasizes that developing country negotiators in the Uruguay Round also need to determine what their national interest is in formulating their position in this group. It may

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2. Taiwan, China is not formally a member of the MFA, but is nonetheless subject to bilaterally negotiated quota restrictions on its textile and clothing exports.

be that on systemic grounds they favour non-renewal of the MFA, since as smaller countries they have an interest in returning all derogations from GATT to existing GATT disciplines, and preventing any new departures from clear system rules. They may, therefore, accept the proposition that whatever the effects of the MFA actually are, textiles and clothing is the place to start in enforcing multilateral disciplines. Alternatively, they may believe that industrialization involves a staged process with production moving first into textiles and clothing and then on to steel and other products, and that removing trade restrictions on textiles and clothing is important for them on developmental grounds. Thus on the basis of country interest alone (discounting any systemic interest) they might be persuaded that non-renewal of the MFA is the course to take.

We do not say this latter position is wrong for any individual country, but we do caution that it is a matter for judgement how severe the need is, and how much negotiating capital should be used up on it. It is not clear exactly how restrictive of trade these measures are, how permanent they have become, nor how far they retard growth. Also, inward foreign investment into lower income developing countries from Korea, Hong Kong and Taiwan, China induced by trade restrictions, has benefitted these countries.

None of the above says that developing countries will not benefit from a removal of the MFA restrictions, but the size of the effect on both the trade and the GDP performance of most

currently participating developing countries cannot be accurately determined on the basis of existing research. The systemic interest of moving the trading system towards more clearly enforced non-discriminatory trade rules may be an equally important concern.

SOME BACKGROUND ON THE MFA

What the MFA is

The MFA contains a series of bilaterally negotiated quota restrictions covering trade in both textiles and clothing between individual developed and developing countries.[3] It is renegotiated every few years under the auspices of the GATT Committee on Textiles.[4] Its GATT incompatibility has never been tested through the dispute settlement procedures of the GATT, but it is clearly inconsistent with several GATT articles (including Article 1 (non-discrimination) and Article 24 (bilateral trade agreements)) to name but two. There are currently nine developed country participants in the MFA: the United States, Canada, the European Community, Austria, Finland, Norway, Sweden, Japan and Switzerland, although the latter two do not currently apply the

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3. The MFA since its inception has dealt almost exclusively with exports from developing countries. Over the period, however, restraints have been applied to Japanese and some East European nations exports as well.

4. The MFA I lasted from January 1974 to December 1977; the MFA II from January 1978 to December 1981; the MFA III from January 1982 to July 1986; and the MFA IV was adopted in August 1986 and runs until July 1991.

MFA restrictions on imports.[5] Developing country participants in the MFA are more numerous, currently numbering thirty-three.[6]

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5. Other developed countries, including Australia and New Zealand, and, for a period of time, Norway, have chosen to rely on GATT compatible global import quotas (Article 19 measures) to restrict their imports of textiles and clothing. Australia participated in the earlier Long-Term Agreement (LTA) and in the MFA until December 1974, when the Australian government imposed global "tariff quotas" outside the MFA. New Zealand has never participated in these special arrangements although throughout the period since 1961, imports of textiles and clothing have been subject to import licensing arrangements, the majority of which involve global quotas. Norway participated in the LTA and MFA I, but did not participate in MFA II. In 1979, Norway introduced global quotas, but these were phased out within one year after Norway accepted the 1981 Protocol of Extension to the MFA in July 1984.

6. As of September 30, 1987, these were Argentina, Bangladesh, Brazil, Bulgaria, China, Czechoslovakia, Egypt, the German Democratic Republic, Hong Kong, Hungary, India, Indonesia, Macao, Malaysia, Malta, Maldives, Mauritius, Mexico, Nepal, North Korea, Pakistan, Peru, Philippines, Poland, Romania, Singapore, Korea, Sri Lanka, Thailand, Turkey, Uruguay, Vietnam and Yugoslavia. Japan is also a member of the MFA as an exporting country (GATT (1987b)).

The origins of the MFA lie in the Short-Term Arrangement Regarding International Trade in Cotton Textiles (STA) negotiated between the United States and Japan in 1961 which grew into a Long-Term Agreement (LTA) in 1962, lasting (with extensions) until the beginning of the MFA in 1974. Through three successive renegotiations of the MFA, it has grown to encompass a successively wider range of products and countries. The spread of these restrictions has been part of a wider growth in product-specific trade restrictions used by developed countries against developing countries in the 1970s and 1980s.[7]

Like the trade restrictions which preceded it in the 1960s, the MFA was intended to provide temporary protection for domestic industries in developed countries. The aim was to allow them time to adjust to foreign competition, while at the same time giving exporters orderly access to developed-country markets. This was considered as advantageous by developing countries relative to having their exports subjected to a series of more ad hoc and restrictive controls. Thus, at its inception the main objective of the MFA was stated "as achieving the expansion of trade, the reduction of barriers to such trade, and the progressive liberalization of world trade in textile products."[8]

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7. Other restricted manufactured products include steel and steel products, machine tools, cutlery, footwear, automobiles, consumer electronics and some agricultural commodities.

8. GATT (1975) pp. 3-19.

Although the first MFA extended trade restrictions to non-cotton textiles because of cotton textile exporters' diversification into wool and man-made fiber products, it was viewed as less restrictive from the previous LTA in that it incorporated compensatory liberalizing moves. These included a 6 percent annual growth for quotas (up from 5 percent under the LTA), and various provisions to make the quotas more flexible. These included a "swing" provision which allowed an exporting country to transfer a quota between product categories in the same year; an allowance for countries to "carry over" up to 10 percent of the unused portion of the previous year's quota; and an advance utilization ("carry forward") of up to 5 percent from the following year's quota. These flexibility provisions were seen as important because they partially offset the restrictive effects of the quota system, and they gave exporters room to respond to changing market demand conditions.

After twenty-seven years of "temporary" protection outside of GATT rules, however, there is still little evidence that trade in textiles and clothing are currently any closer to a return to GATT disciplines.[9] Instead of liberalizing textile and clothing

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9. In the negotiating group on textiles and clothing in the Uruguay Round, there are, however, tentative signs of an agreed commitment to eventually return the textiles and clothing sector to GATT rules. The recent Montreal Mid-Course Review produced a commitment (depending upon resolution of differences in

trade, successive bilateral agreements reached under the MFA appear to have grown progressively more restrictive.[10] Annual growth rates for quotas have generally been below 6 percent; fiber coverage has been extended to include silk blends and other vegetable fibers; country coverage has been extended to include many small suppliers, and flexibility provisions have been reduced. "Anti-surge" mechanisms have also been included to limit full utilization of previously under-utilized quotas to protect developed-country markets from rapid increases in imports.

Trade in Textiles and Clothing

agriculture by April 1989) to engage in substantive negotiations in early 1989 and continue until the end of the Round. Some of the more active developing countries in this group are seeking such a commitment with a clear timetable and phase-out program. Developed countries appear to want to link action in this group to progress in others, such as intellectual property. A possible outcome may be that developed countries drop their insistence on linkage, in return for developing countries dropping their insistence on specificity as to dates and details of a phase-out.

10. This progressive expansion of the MFA in terms of fibre and country coverage has been cited by one leading authority as potentially the most important negative development in world trade in recent years (Corden (1987)).

The significance of trade restrictions under the MFA for developing-countries' trade is immediately apparent once the country pattern of textile and clothing trade is understood. In 1986, world exports of textiles and clothing were $128 billion ($66.25 billion in textiles and $61.80 billion in clothing), of which exports by developed market economies accounted for $71 billion (55 percent), exports by developing countries for $43 billion (34 percent), and exports by the eastern trading area for $14 billion (11 percent).[11] Worldwide, exports of all manufactured goods totalled $1,431 billion in 1986, out of a total of $2,118.70 billion for all merchandise exports.

In other words, trade in textiles and clothing alone accounted for 9 percent of world trade in manufactures and for 6 percent of world merchandise trade. As Table 3-1 shows, in 1986 the developing countries share in world exports of textiles and clothing was 33.4 percent. The developing country shares of world exports of textiles and clothing, and of developed-country imports, have also grown significantly over the post-war years. Textiles and clothing exports are then clearly of major importance to developing countries.

Table 3-2 also indicates that there has been major changes in the composition of this trade. Textiles represent a sharply declining share of developing country manufactured exports. In

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11. The source for the data used in the next few paragraphs is GATT (1987), Table A12. (Billion means thousand million.)

Table 3-1

Developing Countries' Share of World Trade in Textiles and Clothing

Value (%)	1955	1965	1975	1976	1977	1978	1979	1984	1986
Developing countries' share of world exports	13.4	17.2	22.8	26.8	25.8	26.1	n.a.	34.5	33.4
Developing countries' share of developed country imports	10.2	15.8	21.7	26.8	25.6	26.1	25.4	34.4	31.3

Source: 1955-79: Cable (1981), Table 3; 1984-86: GATT (1987a), Table A12.

Table 3-2

Share of Textiles and Clothing in Exports of Manufactures and in Total Merchandise Exports by Main Areas[a]

1955-1986
(Percentages)

	1955	1963	1973	1982	1986
Textiles					
Share of textiles in exports of manufactures by:					
World	11.3	8.7	6.7	4.9	4.6
Developed countries	10.3	7.8	5.8	3.8	3.8
Developing countries	34.3	30.1	18.8	10.6	9.7
Eastern trading area	6.1	5.5	5.1	5.4	5.4
Clothing					
Share of clothing in exports of manufactures by:					
World	1.9	2.7	3.6	3.9	4.3
Developed countries	1.6	2.2	2.3	1.9	2.5
Developing countries	4.0	7.8	14.2	13.6	15.1
Eastern trading area	3.4	3.7	5.1	5.8	6.7

[a]Data in table excludes trade in petroleum

Source: 1955-82: GATT (1984), Tables 2.12 and 2.13; 1986: GATT (1987a), Table A12.

contrast, the share of clothing in manufactured exports has increased considerably.

Table 3-3, however, clearly emphasizes that even with this sharp growth, inter-developed country trade (which includes intra-E.C. trade) still accounts for about half of world trade in textiles and a major component of trade in clothing (a little more than 40 percent). On the export side, Table 3-4 shows that textile and clothing exports are also heavily concentrated geographically. Clothing exports are far more concentrated than textiles, with Korea, Hong Kong and Taiwan, China accounting for over 60 percent of exports to OECD countries.

Growth rates for textile and clothing imports by developed countries from developing countries are shown in Table 3-5. This table suggests that the MFA I and the MFA II slowed the growth of developed-country imports of textiles and clothing. This was most striking for the European Community in the late 1970s with the negotiation of new restrictions under the MFA II (also see Cline (1987)). It was this which also gave rise to severe criticism by developing countries of the protectionist character of the MFA. Table 3-5, however, also shows a resumption of higher import growth in the 1980s, especially during the first three years of the MFA III, 1982-84. Cline (1987) shows this to be particularly the case for the United States in 1983 and 1984. According to his data, over this period annual import growth in the United States averaged 22 percent for textiles in square yard equivalent (SYE) terms and 13 percent for clothing (in SYE

Table 3-3

Textile and Clothing Exports, by Geographic Area

1986

(Billion dollars and percentages in parentheses)

Origin \ Destination	Developed Countries	Developing Countries	Eastern Trading Area	World
Textiles				
Developed countries[a]	33.2	8.0	2.0	43.2
	(77)	(18)	(5)	(100)
Developing countries	7.1	6.9	2.5	16.5
	(43)	(42)	(15)	(100)
Eastern trading area	2.4	2.8	1.5	6.7
	(35)	(42)	(23)	(100)
World	42.7	17.7	6.0	66.4
Clothing				
Developed countries[b]	25.2	2.1	0.8	28.1
	(90)	(7)	(3)	(100)
Developing countries	22.7	2.1	0.6	25.4
	(89)	(8)	(3)	(100)
Eastern trading area	4.3	1.3	2.7	8.3
	(51)	(16)	(33)	(100)
World	52.2	5.5	4.1	61.8

a If intra-EC trade is excluded, trade among developed countries is $14.7 billion rather than $33.2 billion.

b If intra-EC trade is excluded, trade among developed countries is $11.2 billion rather than $25.2 billion.

Source: GATT (1987a), Table A12.

Table 3-4

Textile and Clothing Imports by OECD Countries from Selected Developing Country Exporters

(Percentage Shares)

Destination	Textiles		Clothing	
	1973	1984	1973	1984
Asian Big Three (1)	29.3	26.8	67.7	61.1
China	11.6	17.8	2.6	8.7
Other Asia (2)	29.2	22.4	7.7	13.4
Latin America and the Caribbean (3)	7.2	9.2	2.7	3.2
Other (4)	22.7	23.8	19.2	13.6
Total of Above	100.0	100.0	100.0	100.0

Notes: (1) Hong Kong, Korea, Taiwan, China
(2) Bangladesh, India, Indonesia, Pakistan, Philippines, Sri Lanka, Thailand
(3) Argentina, Brazil, Colombia, Costa Rica, Dominican Republic, Haiti, Peru, Uruguay
(4) Greece, Portugal, Spain, Turkey, Yugoslavia

Source: Goto (1988), Table 4.

Table 3-5

Growth of Textile and Clothing Imports by Developed Countries from Developing Countries

(percent per year in real terms)

Category	1963-76	1976-78	1978-84
Textiles	7.2	4.6	3.7
Clothing	20.9	4.8	10.9
Total	14.1	4.8	9.0

Source: Wolf (1986).

terms). Other data from Cline (1987), reported here as Table 3-6, also show that U.S. imports of textiles from principal suppliers increased in physical quantity terms by 113 percent between 1982 and 1984, while their value rose by 90 percent. The United States imports of clothing from these countries also surged, but by far less than for textiles.

It is these surges which have had industry critics in the United States decrying the effectiveness of the MFA in recent years. Import data from Cline (1987) for the European Community, on the other hand, show not only a deceleration in import growth following the MFA I, but a continuation of the slowing trend into the early 1980s.

How Binding are Trade Restrictions Under the MFA?

These rapidly growing import volumes in the United States have led some, in recent years, to question the degree to which the MFA actually restricts textile and clothing exports of individual developing countries. Data reported in GATT (1984), and reproduced here as Table 3-7, emphasize how sharp this debate is.

In this data, average quota utilization rates are reported for individual supplying countries, averaged over a series of product categories covering both textiles and clothing. These utilization rates are generally below 100 percent, and, for 1982, show a wide variation, ranging from 1.9 percent (Yugoslavia/the United States) to 106.5 percent (Taiwan, China/the United

Table 3-6

U.S. Imports of Textiles and Clothing from Major Suppliers,[a] 1982-84

(millions of dollars, millions of SYE and percentages)

	1982				Percentage increase over the period 1982-84			
	Textiles		Clothing		Textiles		Clothing	
	Value	SYE	Value	SYE	Value	SYE	Value	SYE
Hong Kong	106.8	152.8	1,746.3	689.8	66.0	53.2	26.8	18.1
Taiwan, China	101.8	190.1	1,408.4	748.1	387.0	240.1	38.4	25.0
Korea	154.2	188.2	1,088.0	575.7	138.5	155.3	38.3	18.8
China	200.6	313.9	589.7	356.7	79.8	73.4	27.1	24.7
Japan	460.5	435.1	231.2	76.3	26.6	39.2	88.1	80.3
Sum of those 5 countries	1,024.0	1,280.1	5,063.6	2,446.7	93.8	96.2	35.3	23.3
India	767.0	59.6	149.1	72.9	63.6	104.6	78.4	79.9
Philippines	6.7	9.9	233.9	161.0	21.1	-23.6	57.0	45.6
Singapore	11.4	22.0	170.9	82.4	-49.9	-44.5	72.6	55.0
Thailand	33.5	63.7	93.3	52.9	49.0	64.7	129.2	101.0
Mexico	20.0	53.5	130.9	55.8	205.8	258.8	55.9	54.1
Sum of those 5 countries	148.5	208.7	778.2	425.0	68.8	110.1	73.0	61.3
Italy	170.8	194.7	137.7	13.8	81.6	131.7	209.5	302.1
United Kingdom	84.8	36.8	64.5	6.3	54.4	233.5	116.0	176.2
France	72.4	46.5	65.9	6.4	59.2	88.2	94.6	145.3
Germany	61.6	122.5	18.2	2.5	113.2	132.2	148.6	183.4
Canada	51.4	130.7	42.7	7.8	91.0	119.6	51.0	43.3
Sum of those 5 countries	441.0	531.3	328.9	36.8	78.2	132.1	144.2	190.6
Sum of all 15 countries	1,613.5	2,020.1	6,170.7	2,908.5	87.3	107.1	45.9	31.0
Other suppliers	428.7	532.6	939.9	473.8	100.2	137.4	96.4	91.7
World total	2,042.2	2,552.8	7,110.7	3,382.3	90.0	113.4	52.6	39.5

a MFA categories only

Source: Cline (1987), Table 7.2

Table 3-7

Data on United States and European Community
Quota Utilization Rates[a]
By Supplying Countries, 1982

Exporting Country	Importing Country	
	United States	European Community
	Utilization Rates (percentages)	
Japan	71.1	n.a.
Hong Kong	100.0	79.0
Korea	96.2	89.4
Taiwan, China	106.5	n.a.
Macao	93.9	86.1
Singapore	80.1	61.9
Sri Lanka	85.7	74.0
Thailand	83.2	82.5
Indonesia	100.0	78.1
Malaysia	85.8	59.2
Maldives	100.0	n.a.
India	75.3	69.6
Pakistan	85.1	89.4
Philippines	70.0	64.2
Egypt	n.a.	102.6
Argentina	n.a.	54.1
Mauritius	100.0	n.a.
Brazil	43.3	86.6
Colombia	43.5	35.5
Costa Rica	88.3	n.a.
Dominican Rep.	88.9	n.a.
Haiti	65.5	n.a.
Mexico	38.6	9.8
Peru	n.a.	93.5
Bulgaria	n.a.	64.6
Czechoslovakia	n.a.	78.7
Hungary	n.a.	43.2
Poland	60.5	35.0
Romania	84.9	73.4
Yugoslavia	1.9	n.a.
China	75.4	n.a.

n.a. - not available, usually because no bilateral agreement was in operation

a - Trade weighted average across textile and clothing categories, unadjusted for flexibility provisions.

Source: GATT (1984), Tables 3.14 and 3.15.

States). Moreover, for any given supplying country, the rate of utilization differs across importing regions. For example, in 1982 Brazil's utilization rate of the European Community's quota was 86.6 percent, while for quota granted by the United States was only 43.3 percent. Utilization rates are also volatile over time, differ between products, and between importing and exporting countries. In part, this reflects the ability of exporters to use the flexibility provisions of the MFA to respond to changing economic conditions and rapid changes in fashion needs.

Unfortunately, the data is far from conclusive evidence on the degree of restrictiveness of quotas since there are many reasons why binding quotas can seem to be non-binding. One reason may be the way quota is allocated among importers. Quota in the European Community, for instance, is, in some cases, allocated between importing countries on the basis of historical market shares, regardless of the distribution of demand within the European Community. Hence, demand for, say, winter coats may be unmet in some European Community countries and quotas are binding, but quotas remain unused in other countries and are not allowed to be reallocated. Furthermore, it can be the case that there are aggregate quotas for, say, shirts which are less than the sum of the sub-aggregate quotas for, say, types of shirts. Quotas may thus not appear to be binding at sub-aggregate level, although they are binding at aggregate level. Chaudhry and Hamid (1988), for example, found that in 1983 "the overall United

States quota for Pakistan was less than the aggregate of category-wide quotas by 13.4 percent. Thus, though a category-wide quota may be available, increased export sales may become impossible because of aggregate quota limitations."[12]

On the other hand, quotas can become redundant either because of periods of weak demand, such as in a recession, or as a result of short-term capacity restraints with new longer term investment deterred by the risk of more severe future quotas. Quotas may also be unfilled if the system does not provide enough flexibility (swing, carry-forward, carry-over) for suppliers to enter new-product markets to exploit emerging fashion trends.

For all these reasons, therefore, there is substantial debate on what these quota utilization rates actually mean. If exporting countries can have growth in their exports which is substantially above the 6 percent growth specified in their MFA quotas, how can these restrictions be binding? But if quota rights are traded at positive prices by brokers in Hong Kong, how can they not be binding?

Cline (1987) suggests that much of the increase in imports into the United States in 1980-84 can be attributed to the flexibility provided for quota use within the structure of the MFA. These allowed exporters to take advantage of the overvalued dollar and the strong United States recovery from recession in 1982. Hence, restrictive effects of the MFA can be partially offset through adjustments to basic quotas through flexibility

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12. Chaudhry and Hamid (1988), p.198.

provisions in the MFA. These permit exporters to "swing" some portion of an under-utilized quota to a product category where the quota is binding, and to shift quotas between years (through carry-forward and carry-over). Flexibility provisions, however, have been tightened by a number of importing countries during the MFA II, III and IV.

Another way of weakening the restrictive effect of the MFA trade restraints is through product upgrading. Because the MFA involves physical rather than value restrictions on trade (i.e. by weight, number of pieces or surface area), it encourages quality upgrading through changes in the product mix. The principle reason for upgrading is that producers faced with a volume restriction on their exports can expand their value of sales by moving up-market into higher quality lines within quota categories. This has especially been the case for Hong Kong, who have succeeded in establishing a reputation for quality fabrics and fashion sophistication. Diversification of trade to uncontrolled industrial countries, minor suppliers and to product categories either uncontrolled, or subject to loose "consultation" controls is another effect of the MFA.

Geographical diversification in the form of 'quota hopping' is yet another response to restraints. For example, the dramatic increase in foreign investment activities of Hong Kong clothing industries in lower-wage, less restricted countries can be viewed as partly a response to Hong Kong quota limitations (for example, in Macao in the mid-1960s, Mauritius in the early 1970s, Sri

Lanka and Indonesia in the late 1970s, and more recently in the Maldives and, on a much larger scale, China; see Young and Hood (1985)). However, the MFA IV has tightened restrictions against "false declaration" of country of origin.

All of these features have allowed a sharp growth in imports of textiles and clothing into the United States to occur in the mid-1980s. However, as a study by the Congressional Budget Office (1985) notes, the sharp growth in imports in 1980-84 cannot continue because rising quota utilization rates eventually run their course as quotas become exhausted, and swing provisions and inter-year quota adjustments provide only temporary flexibility. Evidence in Cline (1987) supports this evaluation, showing that the growth in the physical volume of textile imports fell dramatically from 53.7 percent in 1984 to only 5.1 percent in 1985, while the physical volume of clothing imports fell from 20.9 percent to 8.6 percent. Although the pace of import growth accelerated again in 1986 (20.8 percent for textiles and 13.2 percent for clothing), Cline suggests that "the likelihood is that this rise was in response to the extreme overvaluation of the dollar in 1984-85, and perhaps pre-emptive purchasing ahead of feared tightening in view of both MFA renewal and the threatened veto override on the Textile and Clothing Trade Enforcement Bill".[13] There was also a sharp rise in import growth in the European Community in 1985, but this was the result

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13. Cline (1987), p.180.

of a significant expansion in consumer demand following a delayed recovery from the recession.

From this discussion, the conclusion seems to be that protection under the MFA has thus far slowed and obstructed the growth of imports, but because of the flexibility within its structure, it has not been able to prevent temporary import surges, such as those which occurred in the United States in the mid-1980s. The issue, therefore, is whether future restrictions on textile and clothing exports will continue to only slow the growth of developing country exports, or whether growth may be more sharply curtailed.

DO DEVELOPING COUNTRIES GAIN OR LOSE FROM THE MFA?

Evaluating the effects that the MFA actually has on developing countries has been a matter of substantial speculation over the years. One often hears claims, particularly from economists in developed countries, that developing countries have a large interest in seeking elimination of the MFA because of the restriction on their market access abroad. This is then counterbalanced by claims that this source of loss is offset by the quota rents which accrue to the exporting countries as a result of the operation of the MFA as an export restraint.

These observations, in turn, have led to substantial folklore as to what the effects of the MFA actually are, although unfortunately these claims remain largely undocumented by analysis of data carried out within a clear analytical framework. For instance, the claim is sometimes made that for developing countries their gain in quota rents more than outweighs the loss they suffer as a result of the restrictions on their market access, particularly for exports of clothing (see Keesing and Wolf (1980), p.125). As a result, it is said that developing countries generally would not seek to terminate the MFA because of the loss of their quota rents.

On the other hand, it is argued that quota rents only partially compensate for foregone earnings (see GATT (1984), p.152, Mark (1985), p.8). Furthermore, it is the threat of, what for them would be an even worse set of trade restrictions, namely, recourse to Article 19 of GATT that compels developing

countries to seek renegotiation of the MFA. This would involve global import quotas by all importing countries (see Mark (1985), p.12). Under this set of arrangements, importing countries would administer the licences issued to their importers, and developing countries would lose their quota rents. Therefore, the issue is not whether or not a comparison of quota rents can be made to the loss to developing countries from restricted market access, since it is simply the loss of quota rents which will propel them into renegotiation of the MFA.

Folklore goes farther and suggests that the MFA also divides the developing world into higher cost and lower cost suppliers, but here there are further conflicting stories. One which is commonly heard is that the countries who were affected earliest by quota restrictions (Hong Kong, Korea and Taiwan, China) have the largest share of exports to developed-country markets, have relatively high per capita incomes and wage rates, and so under the MFA have a protected market niche against the lower cost suppliers (Keesing and Wolf (1980), pp.130, 165; Mark (1985), pp.9, 13). They, so the argument goes, would not want to see the MFA terminated. But others have argued that under either free trade or a global quota system, the new and small suppliers would be squeezed out of international markets because of the size and greater productivity of established exporters (Mark (1985), p.9).

However, it is also argued that a further effect of the MFA has been to progressively expand the number of countries subject to restrictions. As this has taken place, foreign direct

investment from restricted countries has flowed to unrestricted countries. Thus, when restrictions apply to Hong Kong, investment moves to, say, Malaysia, and if restrictions are subsequently introduced against Malaysia, investments move to, say, Sri Lanka. Thus, under this view of the world, newer entrants into the MFA tend to be the relatively less efficient suppliers who are the most recent recipients of inward foreign investment. Thus, to the extent this is true, with the elimination of the MFA, trade in textile and clothing products would tend to gravitate back to the larger exporters (Hong Kong, Korea and Taiwan, China).

This view is held, for instance, in the Philippines. Medalla and Tecson (1988) argue that "under the MFA the country's exporters enjoy a share of the United States (and the European Community) market which would not have been possible had they been forced to compete under no import controls with veteran exporting countries such as Korea, Taiwan, China and Hong Kong".[14] Similarly, Cable (1987) mentions that "many of the minor exporters, especially the less competitive Latin American and East European exporters, see the MFA as providing a guaranteed market share in a field they would otherwise find difficult to enter."[15]

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14. Medalla and Tecson (1988), p.247.

15. Cable (1987), p.625.

This is, of course, a very different view of the world compared to the more traditional market niche approach. Although it is sometimes claimed that there is no empirical evidence to support this, one can look at the experience of those importing countries who have experimented with both involvement with the MFA and global quotas, such as Canada in 1977 and Norway in 1978. In these cases, under a move to global import quotas import trade became more concentrated on the big three Asian suppliers and moved away from the smaller suppliers (see Jenkins (1980), p.4 and Cable (1987), p.637).

If these are the elements of folklore, one may be tempted to ask what evidence there is on the actual effects of the MFA. Various attempts have been made to estimate the magnitude of foregone exports and transferred rents from trade restrictions in textiles and clothing. Most studies have found the decline in export opportunities and revenues from the MFA to be substantial for developing countries. For example, the UNCTAD (1986) estimated that complete non-discriminatory liberalization (involving both tariffs and the MFA quotas) could increase developing country exports of clothing by 135 percent and textiles by 78 percent. Another estimate by Kirmani and others (1984) suggests that developing country exports to the major OECD countries could increase by 82 percent for textiles and 93 percent for clothing if both trade restrictions were removed.

In recent work, we have also estimated the effects on trade flows of eliminating both quota and tariff restrictions on

developing-country exports of textiles and clothing.[16] We use a global general equilibrium model, which we also employ for welfare analysis of the MFA termination (these results are discussed later). Our results show that foregone exports by exporting developing countries are even larger than those reported by earlier studies, and highly variable across countries. For example, in the central case model results, if all developed country trade restrictions on textile and clothing exports are removed, textile and clothing exports from Korea and Hong Kong would increase by 210 percent and 35 percent, respectively. Moreover, exports from China would increase by 322 percent, while those from Bangladesh would increase by 70 percent. Further, exports from developing countries would increase by more than imports would increase in the United States, Canada and the European Community because of the reduction in inter-developed country trade. For example, imports by the United States, Canada and the European Community would increase, respectively, by 203 percent, 172 percent and 218 percent.

There is also some evidence on quota premiums which indicate both the severity of the trade restrictions against developing countries, and the size of rent transfers. Within Pakistan, for instance, quota premiums currently range from about 50 percent of the FOB value of the item for clothing and cloth, to about 80 percent for cotton knitwear (Chaudhry and Hamid (1988)).

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16. Trela and Whalley (1988).

Hamilton (1988) estimated that import tariff-equivalents of voluntary export restraints on clothing from Hong Kong in the European Community over the period 1980-84 were about 14 percent. In the United States, these same premia were about 28 percent. Similarly, Morkre (1984) found that for nine major clothing product categories, the average quota premium for United States' imports from Hong Kong in 1980 amounted to 23 percent. An earlier editorial in Textile Asia, published in Hong Kong, claimed quota premiums account for 15 to 25 percent of export value.[17]

Few studies, however, have evaluated the relative importance of foregone exports and acquired rents. Even though there are no direct welfare conclusions that can be drawn from such a comparison, Balassa and Michalopoulos (1985) estimate that the value of foregone textile and clothing exports by developing countries to the United States exceeds the transferred rent by a factor of nine, and by a factor of seven for the European Community.

Our recent work also investigates these issues. The global general equilibrium model we use covers three major developed-country importers, the United States, Canada and the European Community, thirty-four developing-country exporters, fourteen textile and clothing product categories, and one composite other

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17. Textile Asia, April 1976, p.11.

good (residual GDP).[18] The fourteen product categories reflect the constraints implied by generating a cross-country data set covering trade under the different MFA quota categories used by the major importing countries (the United States, Canada and the European Community).

All developed countries are treated as net importers of textiles and clothing (and exporters of the other goods), while all developing countries are modelled as exporters of textiles and clothing (and importers of the other goods). Inter-developed country trade is quota (although not tariff) free. The relative size of developed to developing countries reflects differences in the GDP, and so full rent transfer, as in the small economy case, does not occur. Trade in textiles and clothing among developing countries does not enter the model, since otherwise differences in supply prices between these countries would be arbitraged away. Thus, the model captures trade diversion effects between developed countries due to joint bilateral quotas on exports by developing countries. As a result, domestic prices in the

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18. The developing-country exporters are: Bangladesh, Brazil, Bulgaria, China, Colombia, Czechoslovakia, Costa Rica, Dominican Republic, Egypt, Guatemala, Haiti, Hong Kong, Hungary, India, Indonesia, Korea, Macao, Malaysia, Mauritius, Mexico, Nepal, Pakistan, Panama, Peru, Philippines, Poland, Romania, Singapore, Sri Lanka, Taiwan, China, Thailand, Turkey, Uruguay and Yugoslavia.

various developed countries depend on the quota policies of all developed countries not only their own.

The model is calibrated to a 1986 multi-country micro-consistent data set involving production, consumption and trade in fourteen textile and clothing product categories and one other good (residual GDP) for each of the thirty-seven countries captured. Since quota price data are only readily available for Hong Kong, we use data on Hong Kong quota prices for fifteen product categories exported to the United States for 1983 and the first five months of 1984, based on calculations made by Hamilton (1986a), to calculate quota prices for the fifteen categories for 1984. This set of price data is given here in Table 8. Hong Kong quota prices for the other MFA products exported to the United States are calculated on the basis of an average of the quota prices given in Table 3-8.[19] From this data the unit costs of production of individual textile and clothing products in Hong Kong can be calculated.

Production costs of quota restricted items in other supplying countries are calculated by assuming that for each product category, the unit cost can be approximated by the unit cost in Hong Kong multiplied by the ratio of the supplying country's relative wage rate in textiles and clothing compared to Hong Kong. We then make further adjustments for differences in labor productivity and product quality. Quota prices by product

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19. We assume that all bilateral quotas are fully binding in the year in question.

Table 3-8

Hong Kong Quota Prices[1]
for Selected Clothing Items Exported
to the United States from Hamilton (1986a)

Category Description	United States Quota Category Number	1984[2] (5)
Men's cotton jacket	333/334	19
Ladies' cotton jacket	335	27
Cotton Knit shirt and blouse	338/339	50
Men's cotton woven shirt	340	38
Ladies' cotton woven shirt	341	36
Ladies' cotton woven skirt	342	37
Cotton knit sweater	345	59[4]
Men's cotton pant	347	50
Ladies' cotton pant	348	63
Ladies' wool knit blouse	438	19
Wool knit sweater	445/446	120
Men's MMF jacket[3]	633/634	23[4]
Ladies' MMF shirt[3]	635	15[4]
MMF Knit shirt and blouse[3]	638/639	27
Men's MMF woven shirt[3]	640	65[4]
Ladies' MMF woven blouse[3]	641	58[5]
Ladies' MMF pant	648	34[5]
Average[6]		42

1 - As a percent of export price.
2 - 1984 refers to the period January 1983 to May 1984.
3 - MMF = man-made fibers
4 - January to May 1984 only.
5 - January to December 1983 only.
6 - From the proportion of total rent to total export value net of total rent.

and by country are then calculated as the difference between foreign unit costs and prices paid by importers. The resulting average supply prices of restricted products by country are reported in Table 3-9.

The model is used in counterfactual equilibrium mode; calibration to an initial benchmark equilibrium data set followed by counterfactual equilibrium analysis (see Shoven and Whalley (1984)). Results using 1986 data clearly show that the vast majority of developing countries gain from the removal of trade restrictions on textiles and clothing, with some gaining proportionately more than others (see Table 3-10). These effects by country reflect improvements in each country's market share in developed-country markets, as well as the rent transfer effects of the bilateral quotas.

In aggregate, developing countries gain around $8 billion, suggesting that gains to developing countries from improved access more than offset losses from foregone rent transfers as quotas and tariffs are abolished. This is even the case for relatively larger holders of quotas such as Korea and Taiwan, China, who, it has always been argued, have a protected market niche against lower cost competition under the MFA.

In the presence of quotas (and tariffs) they, along with other developing countries, are non-marginal suppliers to developed-country markets. Thus, rather than losing share to other developing countries under an MFA elimination, higher income developing countries (like other lower cost developing

Table 3-9

Average Supply Prices of Quota-Restricted Textiles and Clothing by Country, 1984

(All Prices are expressed relative to U.S. supply prices of unity)

Exporting Country	Adjusted for differences in labor productivity and product quality
Bangladesh	0.36
Brazil	0.31
Bulgaria	0.68
China	0.55
Colombia	0.47
Czechoslovakia	0.68
Costa Rica	0.62
Dominican Republic	0.68
Egypt	0.60
Guatemala	0.60
Haiti	0.55
Hong Kong	0.68
Hungary	0.53
India	0.55
Indonesia	0.52
Korea	0.49
Macao	0.60
Malaysia	0.47
Mauritius	0.52
Mexico	0.60
Nepal	0.55
Pakistan	0.55
Panama	0.68
Peru	0.60
Philippines	0.62
Poland	0.68
Romania	0.60
Singapore	0.63
Sri Lanka	0.55
Taiwan, China	0.60
Thailand	0.60
Turkey	0.31
Uruguay	0.63
Yugoslavia	0.58

Source: Trela and Whalley (1988), Table 4.

Table 3-10

Estimates of
General Equilibrium Welfare Effects of Removing Bilateral
MFA Quotas and Tariffs on Textiles and Clothing
in all Developed Countries[1]

Country	Country Welfare Gain or Loss in terms of Hicksian Equivalent Variations ($ billions 1986)
United States	3.478
Canada	0.311
European Community	3.487
Exporting Countries	
Bangladesh	0.290
Brazil	0.921
Bulgaria	0.002
China	1.640
Colombia	0.309
Czechoslovakia	0.081
Costa Rica	0.007
Dominican Republic	0.005
Egypt	0.046
Guatemala	0.005
Haiti	0.006
Hong Kong	-0.088
Hungary	0.105
India	0.074
Indonesia	0.321
Korea	1.562
Macao	-0.005
Malaysia	0.191
Mauritius	0.030
Mexico	0.101
Nepal	0.018
Pakistan	0.004
Panama	0.001
Peru	0.045
Philippines	0.173
Poland	0.131
Romania	0.104
Singapore	0.016
Sri Lanka	0.053
Taiwan, China	0.884
Thailand	0.017
Turkey	0.629
Uruguay	0.003

Yugoslavia	0.056
All Developing Countries	7.755
All Countries	15.032

1 Transformation and substitution elasticities in the model are set equal to -0.5 and 5.0 in the bottom level of nesting for all countries. In the top two levels, elasticities of transformation and substitution in all developed countries reflect literature estimates of U.S. total demand elasticities and assumed supply elasticities of 1.0. The elasticities are -1.01 and 0.61 in all developed countries. Cobb-Douglas specifications are used at the top two levels in all developing countries.

Source: Trela and Whalley (1988), Table 6.

countries) gain market share due to growth in developed-country markets, and reduced inter-developed country trade.

We also consider other variations in policies, including elimination of the MFA quotas only, leaving tariffs in place which are reported in Table 3-11. In this case, all developing countries are worse off compared to the case in Table 3-10, because their market access is reduced by developed country tariffs. Even larger gains result for the developed countries. This reflects their more advantageous terms of trade as a result of not also eliminating their tariffs.

Even these model results, however, have to be taken with some qualification, since there are several other (indirect) effects of the MFA not captured by any of the currently available studies. One effect is to divert trade from more restricted to less restricted developing countries and even to uncontrolled industrial countries.[20] This effect is apparent in data reported by Cline (1987) on United States' imports of clothing. In 1982-84, United States' imports from the major controlled suppliers (Hong Kong, Korea, Taiwan, China, China and Japan) grew by 23 percent, while those from the industrial countries and from the minor suppliers grew by 191 percent and 92 percent, respectively. Similarly, Wolf (1987) presents data showing that in 1981-85, United States' imports from the Asian Big Three grew at an annual

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20. Our paper only captures trade diversion effects between developed countries.

Table 3-11

Welfare Effects of Removing Bilateral Textile and Apparel Quotas, But Not Tariffs[1]

Country	Country Welfare Gain or Loss in terms of Hicksian Equivalent Variations ($ billions 1986)
United States	5.347
Canada	0.389
European Community	5.029
Exporting Countries	
Bangladesh	0.223
Brazil	0.753
Bulgaria	-0.003
China	0.772
Colombia	0.240
Czechoslovakia	0.018
Costa Rica	-0.003
Dominican Republic	-0.012
Egypt	0.020
Guatemala	0.002
Haiti	-0.003
Hong Kong	-0.573
Hungary	0.056
India	-0.036
Indonesia	0.149
Korea	0.817
Macao	-0.058
Malaysia	0.122
Mauritius	0.013
Mexico	0.030
Nepal	0.008
Pakistan	-0.031
Panama	-0.001
Peru	0.018
Philippines	0.060
Poland	0.047
Romania	0.014
Singapore	-0.042
Sri Lanka	0.000
Taiwan, China	0.164
Thailand	-0.045
Turkey	0.388
Uruguay	-0.004
Yugoslavia	-0.039

All Developing Countries	3.070
All Countries	13.837

1 Transformation and substitution elasticities set equal to -0.5 and 5.0 in the bottom level of nesting for all countries in the model. In the top two levels, elasticities of transformation and substitution in all developed countries reflect literature estimates of U.S. total demand elasticities and assumed supply elasticities of 1.0. The elasticities are -1.01 and 0.61 in all developed countries. Cobb-Douglas specifications are used at the top two levels in all developing countries.

Source: Trela and Whalley (1988); Table 7.

rate of less than 10 percent, while those from other developing countries and from Europe grew by 22 percent and 33 percent, respectively.

Furthermore, since the MFA quotas are in physical terms, they encourage quality upgrading. Evidence for this in the United States case also appears in the data reported from Cline (1987), reproduced earlier as Table 3-6. This shows that for clothing, the real value of imports grew considerably more rapidly than the physical volume over the period 1982-84.

The MFA also has the effect of encouraging investment flows from restricted to non-restricted or less restricted developing countries. The large scale overseas investment activity of Hong Kong is frequently cited in support of this argument. As Kumar and McLeod (1981) point out, the reason why these investments are made is mainly "to circumvent the quotas imposed by the developed countries."[21] However, although foreign direct investment encourages economic development in host countries, these countries are rarely able to penetrate markets to any great extent before being restrained. As a result, their opportunities for industrial development are subsequently diminished by the application of the MFA restrictions.

Another effect of the MFA is to generate quota allocation procedures within developing countries which, themselves, can lead to economic inefficiency. Under the MFA, exporting countries have the responsibility for administering the licence

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21. Kumar and McLeod (1981), p.81.

system. Faced with this, individual developing countries have set up a variety of quota allocation procedures (see Hamilton (1986b), Business India (1987)). While these allocation systems are not completely rigid in their allocations by firm, they nonetheless exhibit considerable stickiness.

First, not permitting trade in licences provides protection for existing firms against more efficient producers and new domestic competition. Second, past performance criteria for allocating quota volumes can result in firms producing at a suboptimal scale. If full transferability were allowed, some firms might simply sell their allocation of licences and close down. The firms which buy the licences could then operate at a more efficient scale of production. Rent-seeking may be yet another effect of these quota allocation procedures leading to sub-optimal resource use.

In sum then, there is conflicting folklore as to what the effects of the MFA on developing countries actually are, and only limited studies yielding firm evidence. The few studies that exist seem to suggest that the transferred quota rents under the MFA do not fully compensate developing countries for their loss of market access. Moreover, the indications from recent work are that most developing countries (including higher cost suppliers) could well gain from an elimination of the MFA because they would jointly share in an expanded developed-country market, reduced developed-country production, and reduced inter-developed country trade. There are, however, a number of unstudied and

unquantified factors which potentially complicate the picture, including the degree to which quotas are binding, effects on inter-developing country investment flows, and quality upgrading.

HOW MUCH DOES THE MFA RETARD DEVELOPMENT?

The preceding discussion of the impacts of the MFA on developing countries focuses on benefits from improved market access, transfers of quota rents, and other effects which spring naturally to the mind of trade theorists. These are, however, largely static rather than dynamic effects; and developing country policy-makers frequently argue that the more serious implications of the MFA are those which affect individual country's growth and development.

In 1985, the OECD also argued that "the expansion of textile and clothing exports had become for the developing countries an increasingly important determinant of their economic development." Their view was that they had seen the highly beneficial results of both economic growth and social development from export-led growth first in Japan, and then in Hong Kong, Korea, Singapore and Taiwan, China. They argued that in order to make moves towards outward-oriented trade policies, developing countries needed not only continued, but expanded access to markets of the major industrial countries, and removing the MFA restrictions played a major role in this.

While the MFA quotas provide certainty of market access for developing-country exports up to agreed limits, poorer developing countries only have limited access to markets abroad compared to traditional suppliers. Although smaller exporters are given higher quota growth rates, they apply to a small base and they do not allow rapid development of indigenous textile and clothing

industries. As Keesing and Wolf (1980) argue, "if the MFA quotas did not exist the developing countries would have the opportunity to follow much the same path to industrialization that Hong Kong, Korea, Singapore and Taiwan, China have been taking and to supplant them as leading clothing exporters."[22]

Moreover, further harmful consequences of the MFA quotas follow from their adverse impact on investment opportunities in developing countries. The experience of Sri Lanka in 1977-78 and Bangladesh in late 1985 when the harsher MFA quotas restricted inward investment flows are examples of discouragement effects due to the MFA. These are particularly serious for countries which are only just starting to foster export-oriented manufacturing. As Chaudhry and Hamid (1988) further point out in discussing the effects of the MFA on Pakistan's textile industry, the MFA has "hampered modernization of the sector, led to expansion of the low cost power-loom sector, and generally put Pakistan technically behind in textiles."[23]

However, the effect of MFA restrictions on the overall growth performance of developing countries provides a more varied picture. For example, despite the increasingly restrictive MFA quotas, the Asian Big Three have continued to have high growth rates through the 1970s and 80s (see Table 3-12). A key factor behind this has been a continuous and rapid expansion of exports,

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22. Keesing and Wolf (1980), p.131.

23. Chaudhry and Hamid (1988), p.207.

Table 3-12

Growth Rates of Real GDP
For Selected Asian Developing Countries

(annual compound rates)

	1960-70	1970-80	1980-85	1986[a]
NICs				
Hong Kong	10.1	9.8	4.2	8.7
Korea	9.5	8.2	7.5	11.4
Singapore	9.2	9.3	6.0	1.9
Taiwan, China	9.6	9.7	6.1	9.9
ASEAN-4				
Indonesia	3.8	8.0	3.6	2.0
Malaysia	n.a.	7.9	5.1	0.5
Philippines[b]	5.2	6.3	-0.9	0.1
Thailand	7.9	6.9	5.3	3.8
South Asia				
Bangladesh	n.a.	5.8[c]	3.9	5.2
Burma	2.8	4.2	5.2	3.7
India	3.9	3.2	5.4	5.0
Nepal	2.2	2.0	3.9	4.2
Pakistan	n.a.	5.6[c]	6.3	7.2
Sri Lanka	5.8	4.7	5.0	4.0
China	4.0	5.8	9.8	7.4

n.a. - not available

a 1986 preliminary estimates except for Bangladesh, Burma, China, Nepal and the Philippines.
b GNP
c 1973-80

Source: James and others (1987), Table 1.3.

fuelled in large part by the growth of exports of textiles and clothing. A trend of increasing protectionism against these countries in other product lines beyond textiles and clothing is also clearly discernible. According to Kim (1988), up until 1976 only Korean exports of textiles and clothing, footwear and cookware were restricted. By 1984, the list of restricted items had grown to also include exports of iron and steel, television sets, and tires and tubes.

Korea's experience illustrates that trade restrictions frequently affect supplying countries as they are beginning to develop a comparative advantage in particular export categories. These restrictions also intensify the pressure on these countries to diversify out of single-process, labor-intensive commodities such as textiles and clothing into more capital and technology-intensive commodities, such as iron and steel and consumer electronics.

One's view of the seriousness of the MFA restrictions for development thus depends, in part, on whether one believes that production of labor-intensive textiles and clothing is the essential first step in a sequence of stages towards industrialization. One famous view of the sequence of stages that countries pass through during the course of their development is that due to Rostow (1960a, 1960b). He argues that all countries can be identified as being in one of five categories: traditional society, exhibiting preconditions for

take-off, at the take-off to sustained growth, showing a drive to maturity, and at a stage of high mass consumption.

The rural agrarian economy is Rostow's traditional society. Development begins with the reallocation of surplus agricultural workers, whose productivity is low, to industry where they become more productive. In the precondition phase, there is a buildup of infrastructure, notably in the form of ports, railways and roads, which are important inputs for primary exports; technological advance in agriculture; expanded markets, an expanded supply of funds to the modern sector; and a rise in the level of investment to at least 10 percent of national income. This is all accomplished through an expansion in imports financed by the surplus generated in agriculture, plus, where possible, capital imports.

The take-off is characterized by a rise in investment to a level in excess of 10 percent of national income. The take-off also exhibits rapid growth in a limited group of manufacturing sectors. These leading sectors have historically ranged from cotton textiles and clothing (Britain and New England), to railroads (the United States, France, Germany, Canada, Russia), to modern timber-cutting and railroads (Sweden). In addition, agricultural processing, oil, import-substitution industries, ship-building and rapid expansions in military output have helped to provide the initial surge in other cases.

During the drive to maturity, growth proceeds in different patterns through a changing sequence of leading sectors.

There is, therefore, no need for the sequence of leading sectors in developing countries today to repeat the classic pattern of, say, Great Britain: cotton, pig-iron, steel, engineering and so on. In fact, in the 20th century, some of the leading sectors have been petroleum (Arab nations), agriculture (Australia, Argentina, Africa, Ivory Coast), rubber, palm-oil and timber (Malaysia), as well as textiles and clothing (Japan, Korea, Hong Kong, Singapore, Sri Lanka to name a few).

During the drive to maturity, leading sectors are determined by the pool of technology as well as by natural or acquired resource endowments. They may also be determined, as well, by the policies of governments. Countries generally develop through structural change in response to shifts in comparative advantage --beginning with specialization in primary products and advancing to single-process, labor-intensive manufactures, capital and technology-intensive goods, and finally to higher technology and knowledge-intensive products.

The effect of the MFA on development is, therefore, a contentious matter. If textile and clothing industries play a key role in the initial industrialization surge in developing countries, then access to markets abroad is not only important in allowing them to trade more and realize traditional gains from trade, but also in speeding their growth by moving through a sequential product line development process. The difficulty with this view of the growth process is that some of the countries,

notably the Asian Big Three, have had remarkable growth rates, despite the increasingly restrictive MFA quotas.

There are even some (Cable (1981), p.34) who argue that trade restrictions on textiles and clothing can be helpful to developing countries by forcing them to progress through stages more quickly and, therefore, grow more rapidly. When combined with the observation that there are several successful growth experiences which appear not to have relied on an initial surge of production (and trade) in textiles and clothing, the significance of the MFA for the growth prospects of individual developing countries becomes even more difficult to pin down.

IMPACTS IN THE DEVELOPED WORLD AND WHAT NEEDS TO BE DONE TO ELIMINATE THE MFA

Beyond the issues of the impact of the MFA on developing countries, and hence whether termination of the MFA is good for them, there are other issues which concern the developed countries.

The MFA, along with the earlier trade restrictions on textiles and clothing in the 1960s, has always been conceived of as a temporary arrangement to allow developed countries' domestic manufacturers and workers to adjust to foreign competition, and so could eventually be eliminated. As such, the MFA has often been projected by developing countries as a trade-promoting measure because of its adjustment-facilitating objectives which seek to provide orderly development of trade, rather than simply being a trade-restricting measure. This is despite the fact that in most modern discussion of the trading system, the MFA is cited as the most visible of the various developed-country product-specific trade restrictions currently in place.

In defining negotiating objectives towards the MFA, it, therefore, becomes central for developing countries to decide whether or not they should view these arrangements as truly temporary, or approach them, instead, as a permanent component of developed-country trade restrictions. One can argue that there has been significant labor adjustment in developed countries, particularly out of textile production, and to a lesser extent, also out of clothing. At the same time, surviving firms have

sought to regain competitiveness through cost-cutting, productivity improvements, outward processing, foreign investment, increased industrial concentration and vertical integration.[24] But despite these changes, there are, and will continue to be, firms in the developed world that, despite reinvestment, cannot compete with lower-cost foreign exports.

What keeps these restrictions in place? In evaluating the impact of the MFA, this is a question that developing countries need to ask. Is it the adjustment problems associated with labor, in which case the continual decline in the size of the work force in these industries will eventually weaken the political support for continued protection. Or is it wider adjustment problems, involving output and capital investment in the industry.

Beyond that, it is important for developing countries to be aware of the political pressures which maintain these trade restrictions as well as other pressures which in the longer run

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24. Both the United States and the European Community provide special tariff provisions to facilitate "outward processing trade" (OPT). For example, the United States' tariff item 807 provides for duty-free re-entry on domestic content, and while the European Community has similar tariff procedures, it additionally includes OPT quotas. In addition to these programs is the newly adopted United States' "super 807" program for the Caribbean countries, which provides quota and tariff-free re-entry on domestic content.

could offset them. In textiles, for instance, in recent years many developed countries appear to have become internationally competitive with lower-wage developing countries due to improvements in productivity through higher technology investment. Textile producers in these countries, however, still strongly support protection for clothing producers in their own countries. This is because their access to markets abroad is restricted by import-substitution policies in a number of developing countries, and they see a strong domestic clothing industry as central to their interest. An issue for developing countries is how far they might be willing to go in trying to splinter the developed-country groups which support the MFA, even to the extent of being willing to liberalize their own restrictions on imports of textiles from the developed world.

With the growth of imports of clothing, there is also growing support for a weakening of textile restrictions among retailers, one of the groups that seems to have been important in the elimination of restrictions on footwear (see Hamilton (1988b)). Retailers and the extent of their political pressure, may therefore, become important in evaluating the appropriate strategy towards the MFA for developing countries.

Data on the adjustments which have taken place in textiles and clothing in developed countries is reported in Table 3-13 (taken from Cline (1987)), for the decades 1963-73 and 1973-83. This covers five west European countries, the United States and Japan. As the table indicates, the experience in all countries

Table 3-13

Changes in Employment in Textiles and Clothing in Major Developed Countries, 1963-83

(percentages)

	Textiles	Clothing	Combined
United States			
1963-72/73	12.0	8.2	9.8
1972/73-1983	-25.2	-14.0	-18.6
Germany			
1963-72/73	-22.2	- 5.7	-15.5
1972/73-1983	-42.6	-52.2	-46.9
France			
1963-72/73	34.0	-17.5[a]	12.5
1972/73-1983	-64.7	-25.6[a]	-52.8
Italy			
1967-72/73	- 8.6	45.1	5.6
1972/73-1981	-28.4	7.9	-15.1
United Kingdom			
1963-72/73	-31.8	-22.4	-28.5
1972/73-82	-50.4	-37.6	-54.6
Netherlands			
1963-72/73	-36.3	-59.1	-49.1
1972/73-1982	-58.5	-70.4	-63.9
Japan			
1963-72/73	- 8.8	55.5	- 0.4
1972/73-1983	-42.2	8.0	-29.7

a Estimated

Source: Cline (1987), Table 5.3.

involves considerably more adjustment in the more recent decade compared to 1963-73. All countries, except Italy and Japan, experienced severe declines in both textile and clothing employment over the period, with the largest decline occurring in the Netherlands.

These changes in employment reflect several effects as De la Torre (1984) argues, including import competition, stagnant demand, and increased productivity. Existing evidence seems to suggest that labor-displacement in textiles and clothing due to productivity growth is more important than increases in imports, although the magnitude of job displacement caused by the different factors varies by sector and by country. De la Torre (1984) provides a simple accounting decomposition of the effects of trade, labor productivity and the size of market demand on clothing employment in six west European countries, the United States and Japan.[25] His results, reported in Table 3-14, show that on average, productivity increases account for 27 percent of the 1970-80 decline in employment in the eight countries, almost three times greater than that due to rising imports. Cline (1987) comes to a similar conclusion in his study of employment change in textiles and clothing in the United States. Even for the import surge of 1982-85, he concludes that the effect on textile employment of import growth was still only one-sixth as

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25. Some of the conceptual difficulties with the decomposition approach are discussed in Grossman (1982) and Martin and Evans (1981).

Table 3-14

Impact of Changes in Demand, Productivity and Trade on Employment in the Clothing Industry, 1970-80

	Belgium	France	West Germany	Italy[a]	Netherlands	United Kingdom	United States	Japan	Total
Total employment (thousands)									
1970	60.5	322	381	207	58.5	377	1,164	326	2,896
1980	39.5	251	249	171	18.1	257	1,075	392	2,453
Change in thousands	-21.0	-71	-132	-36	-40.4	-120	-89	+66	-443
% Change	-34.7	-22.0	-34.6	-17.4	-69.1	-31.8	-7.6	+20.2	-15.3
Effect on employment (% of 1970 employment) of changes in:[b]									
Domestic demand	+82.1	+ 6.7	+10.7	- 1.6	+46.5	+20.5	+32.8	+10.2	+21.7
Productivity	-77.1	-20.1	-23.9	-29.3	-61.4	-44.4	-34.2	+25.4	-27.0
Net imports	-39.9	- 8.6	-21.4	+13.5	-54.2	- 7.9	- 6.3	-15.4	-10.0

[a] Italian figures have been adjusted to account for 'undeclared legal production'
[b] Additions appear to be incorrect due to rounding of figures.

Source: De la Torre (1984), Table 2.19.

large as that from increased productivity. In clothing, rising imports are a more important source of employment declines, but productivity growth remains the dominant effect.

To the extent that adjustment has occurred behind a protective barrier in textiles and clothing, it has involved two components: productivity growth through automation and industry contraction in both output and employment. Table 3-15 (taken from Cline (1987)) presents data on average annual growth rates of output, employment and labor productivity for five West European countries, the United States and Japan over the period 1963-83. The data indicate that productivity growth has proceeded, on average, less rapidly in the United States than in Europe and Japan, and that industry contraction has been relatively less dramatic in the United States, because adjustment has been taking place through reduction in employment, rather than production.

Labor adjustment in textiles and clothing is made more difficult by geographic, demographic, and other factors.[26] Employment is frequently concentrated in areas with a narrow industrial base, and above-average unemployment rates. Examples of this are Northern Ireland and Yorkshire in the United Kingdom, Viborg and Ringkobing in Denmark, Drente and Overussel in the Netherlands, Graftschaft Bentheim and Ahaus in the Federal Republic of Germany.

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26. The discussion that follows draws on OECD (1983).

Table 3-15

Average Growth Rates: Output, Employment, and Labor Productivity, Industrial Countries, 1963-83

(percentages)

	Textiles		Clothing	
	1963-72/83	1972/73-83	1963-72/73	1972/73-83
Germany				
Output	3.4	-1.5	2.8	- 2.8
Employment	-2.6	-5.3	-0.6	- 7.0
Labor production	6.1	3.8	3.5	4.2
France				
Output	n.a.	n.a.	n.a.	n.a.
Employment	3.1	-9.9	-2.0	- 2.8
Labor production	n.a.	n.a.	n.a.	n.a.
Italy				
Output	2.9[b]	2.4[c]	12.0	1.9
Employment	-1.6[b]	-3.9[c]	6.8	0.7
Labor production	4.6[b]	6.4[c]	5.3	1.1
United Kingdom				
Output	2.3	-4.8[d]	2.2	- 1.1[d]
Employment	-4.0	-7.4[d]	-2.7	- 5.0[d]
Labor production	6.3	2.6[d]	4.8	3.9[d]
Netherlands				
Output	1.1	-3.7[d]	-1.0	- 4.0[d]
Employment	-4.7	-9.2[d]	-9.4	-12.8[d]
Labor production	5.8	5.6[d]	8.5	8.8[d]
United States				
Output	4.2	0.7	2.6	1.3
Employment	1.2	-2.8	0.8	- 1.4
Labor production[a]	4.9	3.7	1.3	2.8
Japan				
Output	7.2	-1.0	4.5	- 0.6
Employment	-1.0	-5.2	5.8	0.7
Labor production	8.2	4.3	-1.4	- 1.4

[a] 1961-72 and 1973-85
[b] Base year 1967
[c] End-year 1982
[d] End-year 1982

Source: Cline (1987), Table 5.7.

Table 3-16 confirms that in most developed countries employees in textile and clothing industries, and especially in clothing, tend to be predominantly female and low paid. Women account for about 50 percent of employment in textiles and about 80 percent in clothing, and earnings of textile and clothing workers are consistently lower than those in manufacturing.

These characteristics of textiles and clothing employment tend to raise labor adjustment costs compared to other industries. Since many textile and clothing industries are located in depressed regions, duration of unemployment for displaced workers tends to be higher. In addition, female workers have less continuous employment experience to rely on in getting other jobs, and, as secondary household earners, usually have less mobility. Many of the displaced workers from these industries are in their fifties and sixties, and adjustment problems are compounded because displacement of textiles and clothing workers tends to be largest among unskilled minority worker groups and immigrants.

What are some of the implications of these adjustment problems for efforts to terminate the MFA? All of the factors above which make adjustment difficult out of developed-world textiles and clothing industries, in part, explain why the MFA is there in the first place. There are, however, various approaches that could be taken by developing countries in light of these pressures.

Table 3-16

Female Share of Salaried Employment in the Textile and Clothing Industries, 1977

(Percentages)

Country	Textile Industry	Clothing Industry	Textile and Clothing Industries
Australia	50.5	83.6	67.0
Austria	57.8	85.9	69.2
Belgium	44.6	86.9	63.2
Canada	44.9	74.4	60.2
Denmark	57.6	85.6	71.0
Finland	69.8	90.4	81.4
France	55.0	82.6	67.3
Germany	n.a.	n.a.	n.a.
Italy	61.8	86.8	71.5
Japan	67.1	83.4	71.0
Netherlands	25.0	72.8	41.4
Sweden	49.8	75.9	61.4
Switzerland	45.4	n.a.	n.a.
United Kingdom	47.8	81.3	61.3
United States	46.6	80.9	66.9

Source: OECD (1983), Table 34.

One is to approach the textile and clothing issues separately, as suggested above. This could be through independent initiatives or linked initiatives involving reciprocal liberalization of textiles in developing countries and clothing in developed countries. Another approach would be to build on cases where there has been successful elimination of trade restrictions, such as the case of footwear. In part it seems that this has occurred both because of the smaller employment effects involved and because of the degree of vertical integration in the industry. In footwear, unlike in textiles and clothing, one can find retailers in developed countries who also own the production facilities in developing countries. In such cases, retailers have a significant interest in preventing protection of the domestic market. Vertical integration, therefore, may be a way for developing countries to go, perhaps by modifying some of their own rules on inward foreign investment.

All of this, however, leaves two central questions for developing countries. The first is how they eliminate the MFA, and the second is what are the costs and benefits to them of doing so. First of all, it remains unclear whether the MFA is a permanent or temporary trade restricting measure. In turn, what keeps the MFA in place, in part, is the threat of alternative trade measures should developing countries not agree to a renegotiation of the MFA. The main threat is of Article 19 measures through global import quotas. Thus, dealing with these

alternative threats, particularly through a reformed safeguards code in the Uruguay Round, may, in the long run, be the most important step that the developing countries can take to help weaken the severity of textile and clothing restrictions which they face.

CONCLUDING REMARKS

It is not clear from all of this what developing countries would be advised to do as they consider various negotiating alternatives to attempt to deal with their difficulties with trade restrictions on textiles and clothing. Indeed, it is certainly not clear that all developing countries would currently want to terminate the MFA. Whether developing countries should attempt to weaken the severity of trade restrictions affecting textiles and clothing either by making concessions in other areas, or by attempting to weaken the severity of the threat which causes them to negotiate the MFA is perhaps the central negotiating issue.

Firmer discipline over the use of Article 19 measures through degressivity, time limits and other restrictions would clearly be important in allowing for firmer developing-country positions in any MFA renegotiation. This suggests the importance of the safeguards group in the Uruguay Round for what may or may not happen in textiles and clothing. Concessions made in other groups for developed-country concessions in textiles is a more difficult matter, since trading concessions on GATT incompatible measures for new GATT disciplines by developing countries is something of which developing countries are wary. And how such trades can meaningfully be made without changes in the arrangements which produce the MFA (safeguards, countervailing and anti-dumping duties) remains unclear.

In the final analysis, one has perhaps to conclude that with a developing-country position clouded by the seeming support of many developing countries for a maintenance of the MFA restrictions in the short and medium term, uncertainties as to how much the MFA actually restricts trade, and seeming adjustment occurring in a number of developed countries, our sense is that uncertainties over what the Uruguay Round can produce in the area of textiles and clothing will likely persist until the final stages of the negotiations.

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